

AF
IFW



Docket No.: 3273-0121P
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Patent Application of:
Yasutaka ISHII et al.

Application No.: 09/622,001

Confirmation No.: 5966

Filed: September 22, 2000

Art Unit: 1626

For: PROCESS FOR PRODUCING ORGANIC
COMPOUNDS USING CATALYTIC IMIDE
COMPOUNDS

Examiner: T. A. Solola

REPLY BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This refers to the Examiner's Answer that was mailed on July 22, 2005.

Applicants gratefully acknowledge the withdrawal of the rejection under 35 U.S.C. §101.
Examiner's Answer, page 6.

On page 2 of the Examiner's Answer, the Examiner refers to "grouping of claims" practice. It is respectfully pointed out that "grouping of claims" practice is no longer in effect, and that it has been replaced by "separate argument" practice as described in 37 CFR 41.37(c)(1)(vii).

35 USC 112, second paragraph

At the bottom of page 3 of the Examiner's Answer, the Examiner alleges that "35 USC 112, 2nd requires a claim to be clear, distinct and particularly points [sic] out the invention". This is

incorrect. Instead, the second paragraph of 35 U.S.C. §112 requires that the claims particularly point out and distinctly claim “the subject matter which the applicant regards as his invention”. Thus the focus in 35 U.S.C. 2nd paragraph is on the applicant’s perspective rather than on the Examiner’s view of the invention or on the USPTO classification system.

Also at the bottom of page 3 of the Examiner’s Answer, the Examiner expresses the opinion that “ ‘Organic compound’ is not a sufficient identity of a compound”. Whether or not the Examiner’s opinion in this regard is correct, his opinion is irrelevant to the present situation. In the present situation, the broadest claim refers not to “an organic compound” broadly but instead to “an organic compound which is an addition or substitution reaction product of a compound (A) and a compound (B) or an oxidized product thereof, wherein said product is selected from the group consisting of [defined groups of compounds]”.

On page 4 of the Examiner’s Answer, the Examiner discusses decisions in the *Fischer*, *Skoll*, and *Mercier* cases. *Fischer* was cited by Applicants for the proposition that a claim need not necessarily identify the entire structure of a compound referred to in the claim. With regard to *Skoll*, the Examiner’s contention that “all specific organic and inorganic acids are well known in the art” is not understood. The Examiner questions the applicability of *Mercier* to the present situation. The court states in *Mercier* that “... if one can determine whether a particular catalytic process ... is or is not within the scope of a claim, the claim fulfills its purpose as a definition.” 185 USPQ at 780. Thus *Mercier* clearly supports Applicants’ position that the Examiner’s statement in the last sentence on page 4 of the Answer is not relevant to the second paragraph of 35 U.S.C. §112. The question under 112 2nd ¶ is not whether “one of ordinary skill in the art would have to try all” of the reactants. The question is whether one skilled in the art can “determine whether *a particular catalytic process* for producing an organic addition or substitution reaction product is within the scope of each and any of claims 1, 3, [and] 21”. Applicants’ Brief, page 6, top (emphasis supplied).

35 USC 112, first paragraph

Wands factors 1 and 2 relate to the breadth of the claims and the nature of the invention as those factors impact enablement (112 1st ¶). The Examiner discusses the issue of whether the claims distinctly define the invention, which is a consideration under the second paragraph of 35 U.S.C. §112 rather than under the first paragraph thereof.

Wands factor 3 relates to the state of the prior art. The Examiner argues that “the instant claims are drawn to the making of nonspecific compounds from non-specific reagents”. Rather than “non-specific reagents”, the claims in question produce e.g. an addition reaction product in which an adjacent position to an oxygen atom of an oxygen-atom-containing compound (having a carbon-hydrogen bond at the adjacent position to an oxygen atom) is bonded to a carbon atom of an unsaturated bond of an unsaturated compound. The portions of the reagents that are relevant to the recited processes are specific (e.g., “oxygen-atom-containing compound having a carbon-hydrogen bond at the adjacent position to an oxygen atom”, “unsaturated compound”) and are fully enabled.

With regard to *Wands* factor 4, the Examiner appears to maintain his position that “the level of skill in the art is limited to what is disclosed in the specification for making α -hydroxy- γ,γ -dimethyl- γ -butyrolactone”. Applicants contend that the Examiner has seriously underestimated the level of skill in the art of synthetic chemistry.

In the Appeal Brief that was filed on June 6, 2005, Applicants discussed *Wands* factors 5, 6, and 7 on pages 8-10. Applicants referred “to **pages 24-107** of the specification, which provide **voluminous and detailed direction and guidance** as to how to practice the presently claimed invention” and to the “thirty-eight (38) **different fully documented working Examples (!)** illustrating the practice of a wide variety of embodiments of the present invention” (emphasis in originals). Instead of addressing the significance of all this extensive and detailed disclosure, or of providing reasons for believing that Applicants should have provided still more disclosure, the Examiner simply argues that “practicing the claims would constitutes [sic] a serious and undue burden”. Assuming for the sake of argument that it would be burdensome to carry out each and

every reaction contemplated by the present claims, that is still not an argument that Applicants' specification fails to enable those skilled in the art to practice any aspect of the presently claimed invention.

Regarding *Wands* factor 8 (undue experimentation), Applicants had argued on page 10 of the Appeal Brief:

To establish coverage under claims 1, 3, and 21, one simply allows a compound capable of forming a stable radical as defined in (A1)-(A3) to react with a radical scavenging compound as defined in (B1) and (B2) – in the presence of an imide compound of Formula (1) and, for claim 21, in the presence of a metallic co-catalyst – and then one determines whether an addition or substitution reaction product has formed. Where is the *undue* experimentation in this simple test?

The Examiner's answer to this is that "the claims do lend themselves to undue experimentation for reasons set forth above under factors 5, 6 and 7". The Examiner "sets forth above" a few types of reactants involved in the claimed process, but fails to indicate how working with those types of reactants requires *undue* experimentation. The question remains – what is "undue" about allowing a compound capable of forming a stable radical *as defined in (A1)-(A3)* to react with a radical scavenging compound *as defined in (B1) and (B2)* in the presence of a Formula (1) imide catalyst?

Finally, in his paragraph at the middle of page 6 of the Examiner's Answer, the Examiner appears to indicate that because he has required election of species, only the disclosure relating to the elected species is to be considered in connection with issues under the first paragraph of 35 U.S.C. §112. There is, of course, no basis for ignoring any of the disclosure herein.

For any questions concerning this application, please contact Richard Gallagher, Reg. No. 28,781, at (703) 205-8008.

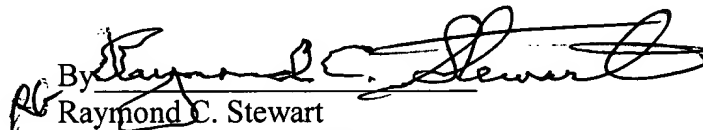
Application No.: 09/622,001

Docket No.: 3273-0121P

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Dated: August 29, 2005

Respectfully submitted,

By 
Raymond C. Stewart

Registration No.: 21,066

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Rd

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant